

ANALYSIS OF HOSPITALIZATIONS DUE TO PROSTATE CANCER AND HOSPITAL COSTS IN THE NORTHERN REGION OF BRAZIL BETWEEN 2015 AND 2024

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Introduction: Prostate cancer is one of the leading causes of morbidity and mortality among men in Brazil, especially in the elderly population over 65 years of age. In the Northern Region, according to the National Cancer Institute (INCA), a total of 2,760 new cases were estimated for 2023, with a crude rate of 38.88 cases per 100,000 inhabitants, while Brazil's national crude rate is 55.49 per 100,000. Thus, the analysis of hospital data can reveal important patterns of illness and mortality, highlighting the growing demand for oncological care and the financial impact associated with hospitalizations. **Objectives:** This study aimed to analyze the number of hospitalizations, deaths, and hospital expenses related to prostate cancer in the states of the Northern Region of Brazil, from 2015 to 2024. **Methods:** This is an ecological and descriptive study based on the Hospital Information System (SIH), provided by DATASUS. The data were organized and tabulated using Microsoft Excel, where a quantitative analysis was performed on hospitalizations, deaths, hospital costs, and distributions by age group and race/ethnicity of patients. **Results:** From 2015 to 2024, a total of 12,626 hospital admissions and 1,683 deaths due to prostate cancer were recorded in the Northern Region. The year 2024 registered the highest number of hospitalizations (1,590) and deaths (224). However, the year with the highest proportion of hospital expenses was 2023, accounting for 13.92% of the total in the analyzed period. The state of Pará stood out with the highest number of hospitalizations (4,434) and also the highest expenses, representing 40.89% of hospital costs related to prostate cancer. In contrast, Amapá had the lowest number of hospitalizations (490), while Acre recorded the lowest number of deaths (76). Age group analysis revealed a progressive increase in hospitalizations and deaths with advancing age, with individuals over 80 years being the most affected, accounting for 15.01% of hospitalizations and 26.44% of deaths. Regarding race/ethnicity, the mixed-race population (pardo) was the most affected, accounting for 75.13% of hospitalizations. Although the Northern Region presents the lowest absolute numbers in the country, the data reveal concerning patterns of hospitalizations and deaths. **Conclusion:** The results highlight the significant burden that prostate cancer places on the hospital system of the Northern Region, especially in states like Pará. The increase in hospitalizations and deaths with age underscores the need for preventive strategies and early diagnosis aimed at the elderly population. The predominance of hospitalizations among mixed-race individuals points to inequalities that must be addressed through early, equitable, and effective public health policies. Understanding this data can support actions to reduce mortality and hospital costs associated with this neoplasm.

Keywords: Prostate cancer; Neoplasm; Hospitalizations.

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